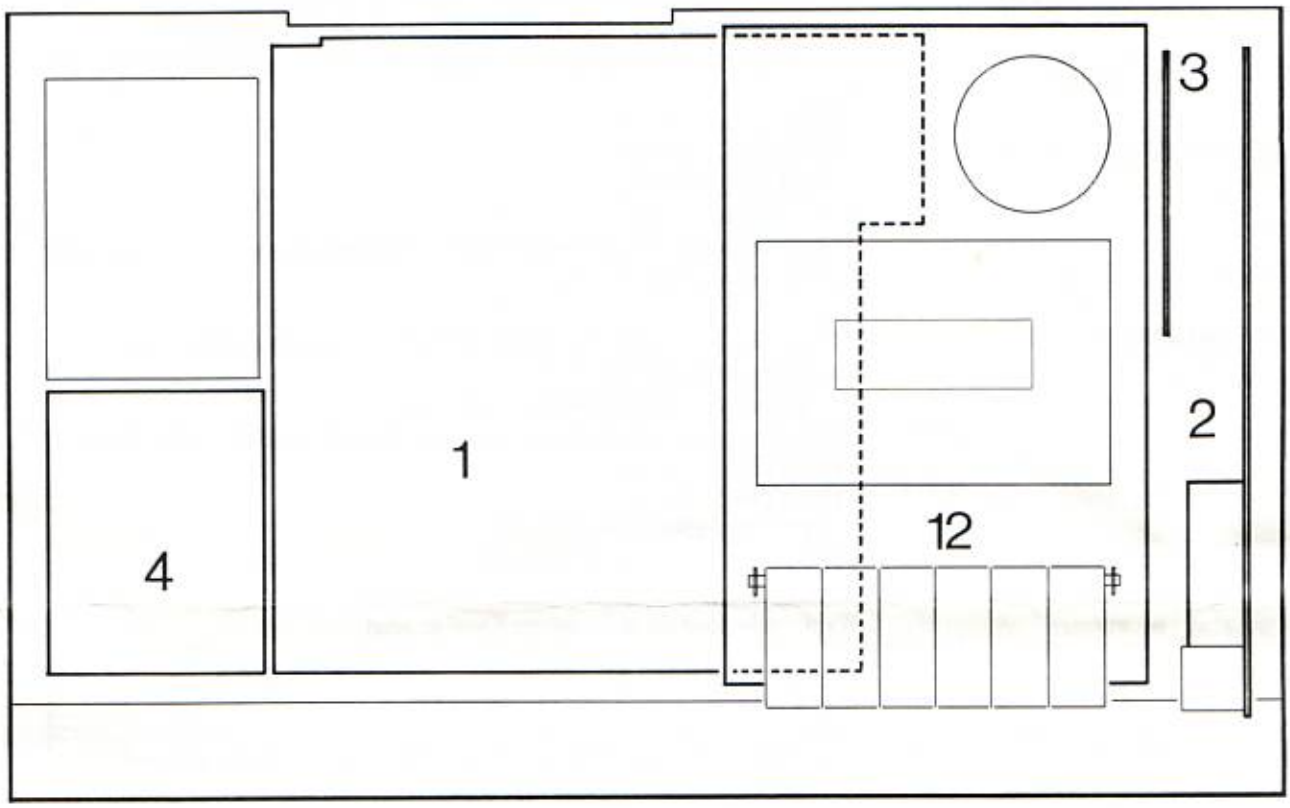
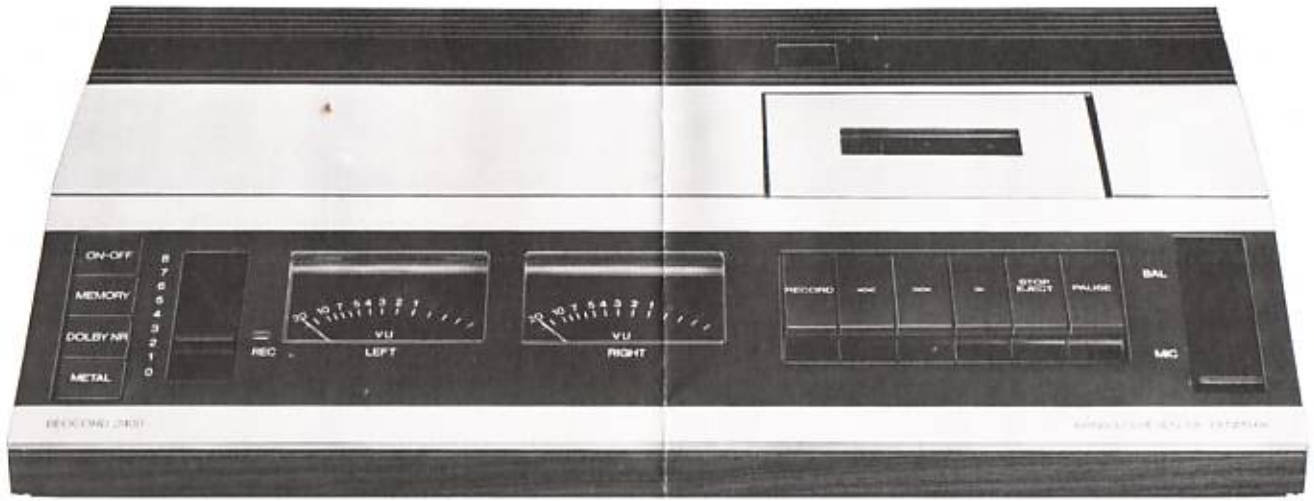
Bang&Olufsen



Beocord 2400, type 2663-65



Setting Up
Your Beocord 2400 is designed for horizontal placement on a desk or in a wall of shelves.
The depth dimension inclusive of leads and plugs is 29 cm. The width dimension is 41 cm. Avoid placing your Beocord directly above a radiator, where the temperature is considerably higher than in the rest of the room.

Mains
The Beocord is designed for 240 volts AC, 50 Hz.

For the UK market only.
Important
The wire in this mains lead are coloured in accordance with the following code:
Blue: Neutral
Brown: Live.
As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:
The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

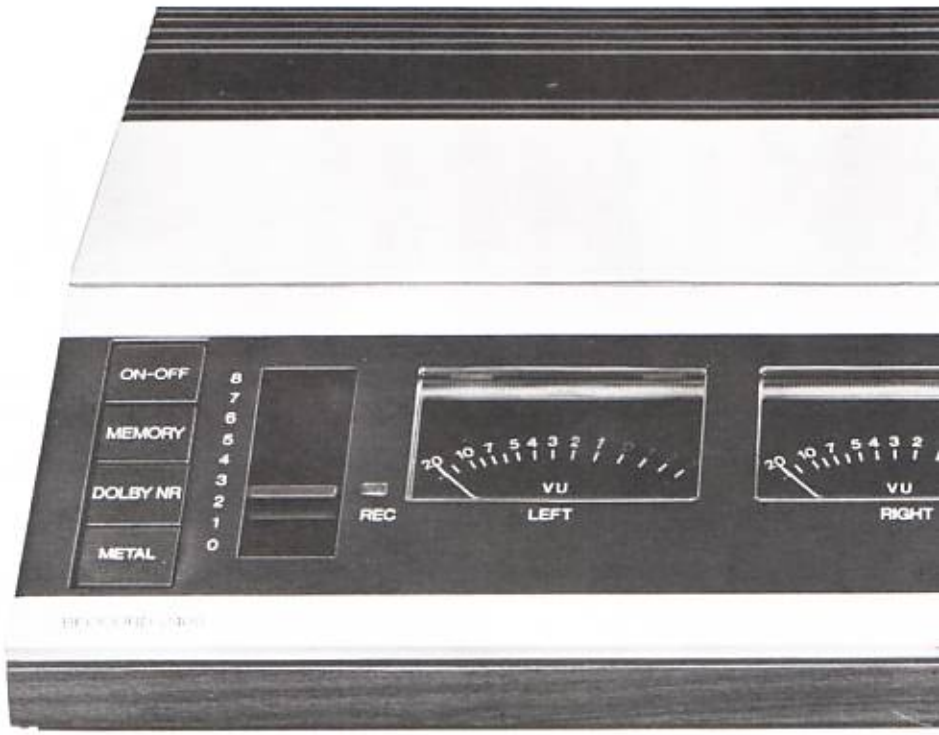
Ensure that your equipment is connected correctly. If you are in any doubt, consult a qualified electrician.
This set requires a **3 Amp.** fuse in the mains plug.

Connecting the Beocord to a Radio set
Plug the 0961014 cable which is provided into the AMPLIFIER socket on the back of your Beocord and the TAPE socket of the radio set or amplifier.

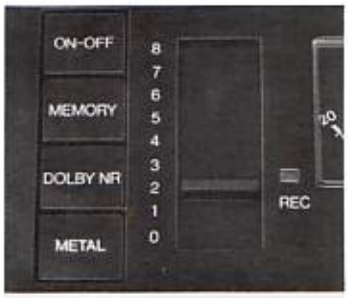
Dolby Noise Reduction★
Dolby noise reduction is a function to reduce tape selfnoise, which can be troublesom during reproduction of weak sounds and during pauses in the music.
The system operates during both record and playback, and many of the commercially available recorded tapes have been recorded with Dolby noise reduction. The principle is that weak tones in the treble range are accentuated during the recording process, and during playback a commensurate reduction is made of the same tone range, and hence also of the noise level in that range.
If you know in advance that tape cassette is to be played back on another tape recorder which does not have built-in Dolby noise reduction, you should make your recording without the Dolby function cut in.

*Trademark of Dolby Laboratories Inc.

MIC
Your Beocord has provision for connection of a low-impedance microphone, mono or stereo, balanced or unbalanced. The socket is placed under the sliding lid MIC.
All recordings will be mono, and recording from radio or record player is cut off automatically.



ON-OFF
To switch on your Beocord, depress ON.
To swtich off, press the same button again.



BEOCORD 2400

MEMORY
Automatic stop during rewind every time the counter passes 000. Is operative when the MEMORY button is depressed, and the counter is placed on zero.

DOLBY NR
Noise reduction system which functions on both record and playback. Depress button when playing Dolby NR recordings and when you yourself want to make Dolby NR recordings. Button should be left released during playback of non-Dolby NR recordings.

Choice of tape type
Adjustment is automatic for Ferro and Chrome tapes. Depress METAL key when playing back or recording on Metal tape.

Forward tape motion, play and record

Rewind

Fast forward

Automatic Stop
When the tape of a cassette has finished, forward tape motion stops automatically. The same applies after rewind and fast forward.

BANG & OLUFSEN OF DENMARK

Stop-eject
Tape stops the first time STOP is pressed. Pressing STOP a second time opens the cassette holder, EJECT.

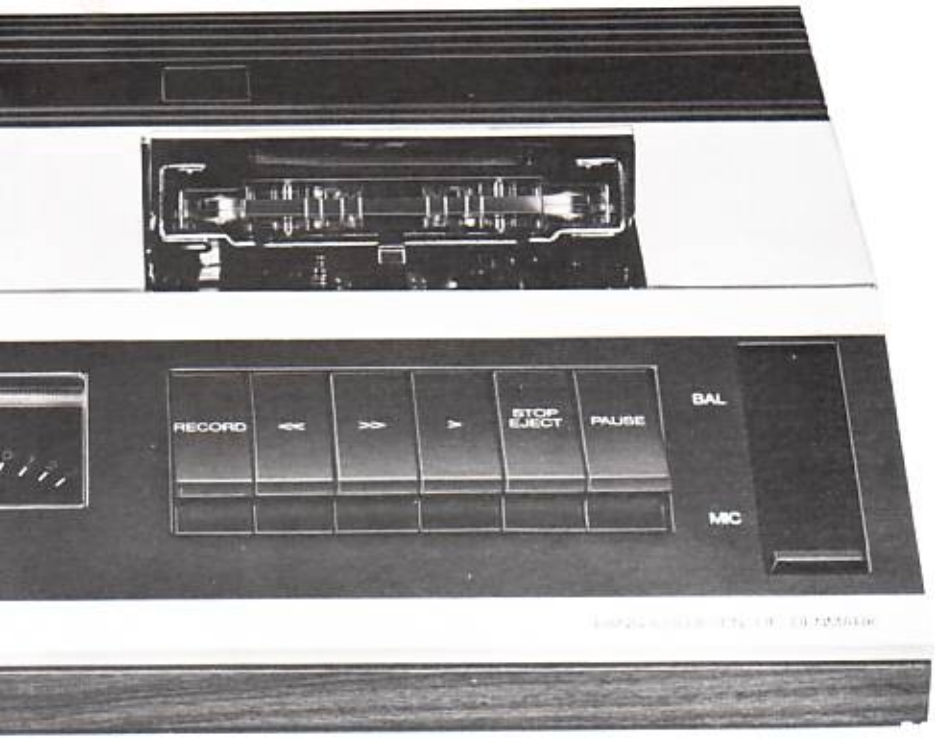
PAUSE
Pause during forward tape motion: Tape stops the first time PAUSE is pressed. Tape motion continues when button is pressed again. The pause feature may be used during both playback and record.

RECORD
First you select program on the receiver: FM, AM, or gramophone. Keep the RECORD button depressed and thereafter depress forward button. Move the sliding knob REC forward while at the same time reading the two VU-meters.
The deflection should normally be helt just below 0 dB, but may in short powerful passages pass the red + figures.
You may depress the PAUSE button while presetting the recording level as described, before beginning to record.

VU-Meters
The two VU-meters are adjusted so that VU 0 dB corresponds to the standardized Dolby NR level (200 pWb). Without Dolby NR, recording can take place until +2 dB at the VU-meters (250 pWb at 3% distortion).

Balance
Under the same sliding lid where microphone socket is placed, you will find a balance button.

Tape
This Beocord is adjusted for tapes following European Standards (DIN). A large number of ferro tapes manufactured after other standards do exist. Several of these tapes will accentuate the treble range when recording. However, chrome tapes or tapes with chrome features are more uniformed.



Ferro-chrome tapes, with double magnetic coating often give the best result when recording like ferro-tapes and replayed like chrome tapes.

Tape Counter
The tape recorder has a three figure resettable counter.
To reset, press the top of the counter.
Counter readout is orientative and intended for notes, e.g. on the tape cassette proper. The figures have no direct relation to playing times in minutes, but depend on tape thickness and cassette type, C60 or C90.
The following time table can therefore be considered as normative.

Maintenance
Tape heads. To secure pure clear sound quality, the two magnet heads must be kept free from tape dust. Use one of the commercially available cleaning.

With the cassette holder open and no tape cassette inserted rub the two heads with a wad of cotton wrapped around a matchstick and dipped in the cleaning agent.

Metal Surfaces
The external surfaces of your Beocord can normally be kept clean with a dry cloth. Any grease spots can be removed with a soft cloth moistened with cold or lukewarm solution of detergent in water, followed by thorough drying with a dry cloth. Use of alcohol is inadvisable as this may cause damage to the transparent portions of the cursons and the VU meters.

TECHNICAL DATA

Beocord 2400	**Type No. 2663**
Compact cassette	C46 – C60 – C90
Tape head	Sendust
Noise reduction	Dolby NR
Tape switch	Aut. ferro/chrom, manual metal
Wow and flutter DIN	< ±0.15%
Wow and flutter WRMS	<0.09%
Speed deviation	< ±1%
Fast forward and rewind C60	90 sec.
Frequency range metal/chrom/ferro	30-16.000 Hz ±3 dB with MPX filter
Signal-to-noise ratio metal Dolby NR	>66 dB
Signal-to-noise ratio chrom Dolby NR	>64 dB
Signal-to-noise ratio ferro Dolby NR	>62 dB
Signal-to-noise ratio metal	>59 dB
Signal-to-noise ratio chrom	>57 dB
Signal-to-noise ratio ferro	>55 dB
Channel separation	>35 dB
Erasure	>70 dB
Erasure frequency	96 kHz
Radio input DIN	1 mV/10 kohms
Microphone input DIN	0.3 mV/3.3 kohms
Radio output DIN	700 mV/10 kohms
Power supply	220 V (110-130-240 V)
Power frequency	50 Hz
Power consumption	20 W
Dimensions W x H x D	40 x 8 x 25 cm
Weight	5 kg

Subject to change without notice

Bang&Olufsen

MÅLEBETINGELSER

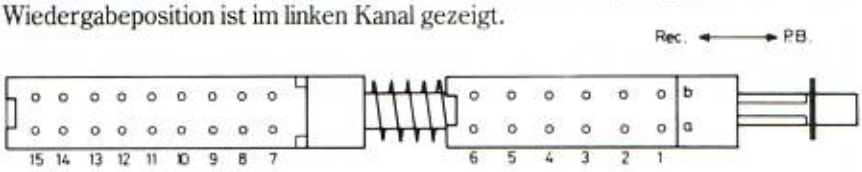
DC spændinger er målt i forhold til stel, med voltmeter med en indgangsmodstand på 11 Mohm, DC spændinger er opgivet i volt (V).
AC spændinger i gengive stilling med pegel bånd (333 Hz 250 pWb mm)
1TP1/1TP4 35 mV
1TP3/1TP6 725 mV
1TP7/1TP8 2500 mV
1TP9 stilling Rec. Cr. 53 V 96 kHz.
Signalvejen i optage position er vist i højre kanal, og gengive position er vist i venstre kanal.

MEASURING CONDITIONS

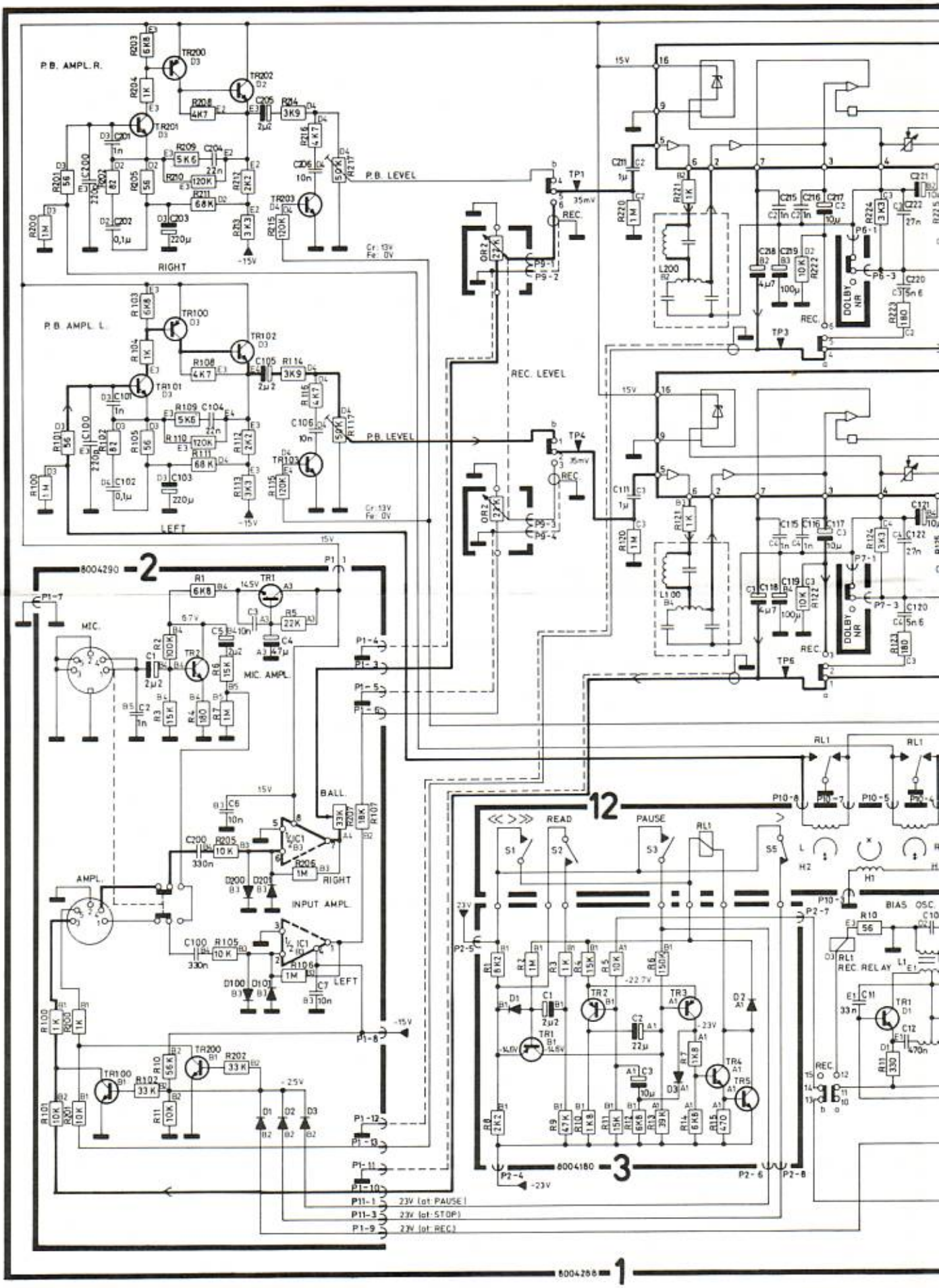
DC voltages have been measured in relation to ground with voltmeter with an input resistance of 11 Mohms. DC voltages are stated in volts (V).
AC voltages in position play back with play back level tape (333 Hz 250 pWb mm).
1TP1/1TP4 35 mV
1TP3/1TP6 725 mV
1TP7/1TP8 2500 mV
1TP9 position rec. Cr. 53 V 96 kHz.
The signal path in position record is shown in right channel, and position play back is shown in left channel.

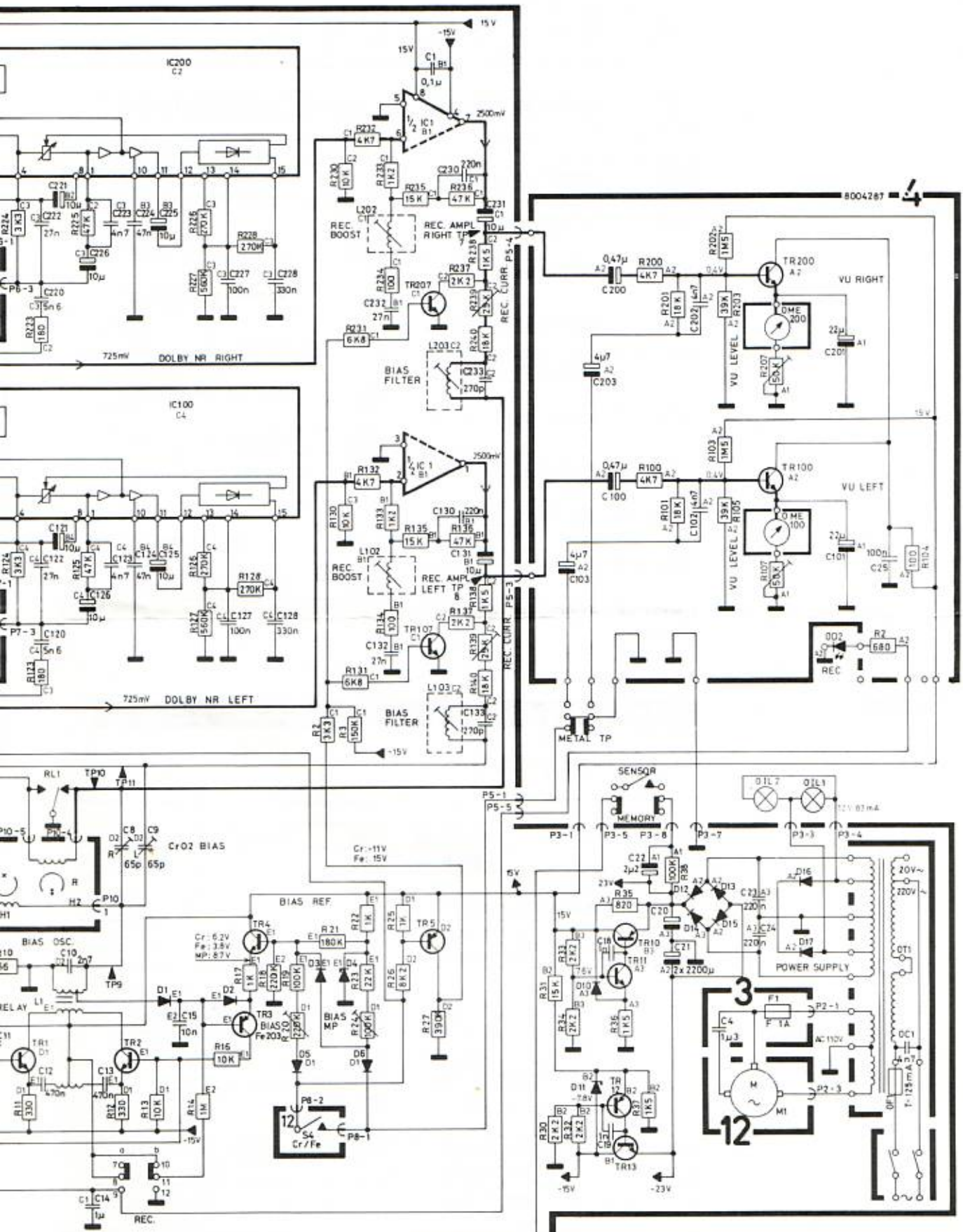
MESSBEDINGUNGEN

DC Spannungen sind im Verhältnis zu Masse, mit Voltmeter mit einem Eingangswiderstand von 11 Mohm gemessen.
DC Spannungen sind in Volt (V) aufgegeben.
AC Spannungen in Wiedergabeposition mit Pegelband (333 Hz 250 pWb mm).
1TP1/1TP4 35 mV
1TP3/1TP6 725 mV
1TP7/1TP8 2500 mV
1TP9 Position Rec. Cr. 53 V 96 kHz.
Der Signalweg in Aufnahmeposition ist im rechten Kanal gezeigt, und die Wiedergabeposition ist im linken Kanal gezeigt.



Bang&Olufsen

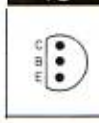
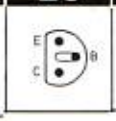
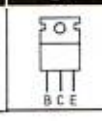
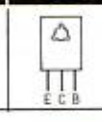
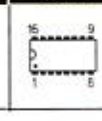
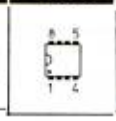




Noise reduction system manufactured under license from Dolby Laboratories Dolby and the double-D symbol are trade marks of Dolby Laboratories.

0T1 soldered for:
Type:
2663 220V
2665 240V

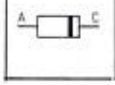
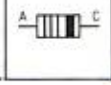
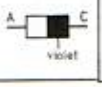
LIST OF TRANSISTORS AND IC's

19	20	31	32	101	103		
							

1TR1	8320237	**20**	BC 546B
1TR2			
1TR3	8320152	**20**	BC 557B
1TR4	8320097	**20**	BC 547B
1TR5	8320152	**20**	BC 557B
1TR10	8320369	**31**	BD 534
1TR11	8320097	**20**	BC 547B
1TR12	8320152	**20**	BC 557B
1TR13	8320368	**31**	BD 533
1TR100/200	8320152	**20**	BC 557B
1TR101/201	8320344	**20**	BC 550B
1TR102/202	8320097	**20**	BC 547B
1TR103/203			

1TR107/207	8320366	**19**	MPS A16
1IC1	8340294	**103**	LF 353BN
1IC100/200	8340183	**101**	LM 1011AN
2TR1	8320097	**20**	BC 547B
2TR2	8320344	**20**	BC 550B
2TR100/200	8320097	**20**	BC 547B
2IC1	8340195	**103**	LF 353BN
3TR1	8320152	**20**	BC 557B
3TR2			
3TR3			
3TR4	8320323	**19**	MPS A05
3TR5	8320292	**32**	BD 137/W
4TR100/200	8320377	**20**	BC 547C

LIST OF DIODES

209	215	217					
							

0D2	8330058		CQV 36 TSN
			V-510-P
1D1	8300058	**217**	SFD 184
1D2		**215**	1N 4148
1D3		**209**	1N 4148
1D4	8300218	**209**	ZPD 13V 5%
		209	BZX 79C
			13V0
		209	BZX 83C
			13V0
1D5	8300058	**217**	SFD 184
1D6		**215**	1N 4148
		209	1N 4148
1D10	8300173	**209**	ZPD 8.2V5%
1D11		**209**	BZX 79C8V2
		209	BZX 83C8V2

1D12	8300023	**209**	1N4002/RL
1D13			
1D14			
1D15			
1D16			
1D17			
2D1	8300058	**217**	SFD 184
2D2		**215**	1N 4148
2D3		**209**	1N 4148
2D100/200			
2D101/201			
3D1	8300058	**217**	SFD184
		215	1N 4148
		209	1N 4148
3D2	8300023	**209**	1N 4002/RL
3D3	8300058	**217**	SFD 184
		215	1N 4148
		209	1N 4148